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CLAIMS:

What is claimed is:

- 1 1. A tape cartridge, comprising:
2 a tape;
3 a contactless memory device positioned in a corner
4 of the tape cartridge; and
5 a flexible antenna connected to and encircling the
6 memory device,
7 wherein the flexible antenna receives radio
8 frequency signals from a transmitting antenna, and
9 wherein the flexible antenna is bent around the
10 corner of the tape cartridge so that signals may be
11 received by the flexible antenna through at least two
12 surfaces of the tape cartridge.
- 1 2. The tape cartridge of claim 1, wherein the radio
2 frequency signals from the transmitting antenna energize
3 the flexible antenna via inductive coupling.
- 1 3. The tape cartridge of claim 2, further comprising:
2 wherein the energized flexible antenna returns a
3 radio frequency signal containing tape cartridge data
4 stored within the memory device to the transmitting
5 antenna.
- 1 4. The tape cartridge of claim 3, wherein the signal
2 containing memory device data is returned via a
3 backscattering modulation.

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1 5. The tape cartridge of claim 1, wherein the
2 transmitting antenna is connected to a tape drive.

1 6. The tape cartridge of claim 1, wherein the
2 transmitting antenna is connected to a hand held reader.

1 7. The tape cartridge of claim 1, wherein the flexible
2 antenna is a helical antenna.

1 8. A tape cartridge, comprising:
2 a tape;
3 a contactless memory device positioned in a corner
4 of the tape cartridge; and
5 at least two antennas connected to the memory
6 device,
7 wherein the at least two antennas receive radio
8 frequency signals from a transmitting antenna, and
9 wherein the at least two antennas are positioned
10 orthogonal to each other in the corner of the tape
11 cartridge so that the signals may be received by the at
12 least two antennas through at least two surfaces of the
13 tape cartridge.

1 9. The tape cartridge of claim 8; wherein the radio
2 frequency signals from the transmitting antenna energize
3 the at least two antennas via inductive coupling.

1 10. The tape cartridge of claim 9, further comprising:
2 wherein the energized antennas return a radio

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3 frequency signal containing tape cartridge data stored
4 within the memory device to the transmitting antenna.

1 11. The tape cartridge of claim 10, wherein the signal
2 containing memory device data is returned via a
3 backscattering modulation.

1 12. The tape cartridge of claim 8, wherein the
2 transmitting antenna is connected to a tape drive.

1 13. The tape cartridge of claim 8, wherein the
2 transmitting antenna is connected to a hand held reader.

1 14. The tape cartridge of claim 8, wherein the at least
2 two antennas are helical antennas.

1 15. A method of transmitting data from a tape cartridge
2 using radio frequency signals, comprising:
3 positioning a memory device in a corner of the tape
4 cartridge, wherein the memory device is connected to and
5 encircled by a flexible antenna;
6 receiving a radio frequency signal sent from a
7 transmitting antenna at the flexible antenna, wherein the
8 flexible antenna is bent around the corner of the tape
9 cartridge so that signals may be received by the flexible
10 antenna through at least two surfaces of the tape
11 cartridge;
12 detecting a decrease in amplitude at the
13 transmitting antenna indicating the presence of the
14 memory device;

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15 transmitting tape cartridge data stored in the
16 memory device to the transmitting antenna.

1 16. A tape cartridge, comprising:
2 a tape;
3 a contactless memory device positioned in a corner
4 of the tape cartridge; and
5 an antenna imbedded into the frame of the tape
6 cartridge, wherein the imbedded antenna is connected to
7 the memory device,
8 wherein the imbedded antenna receives radio
9 frequency signals from a transmitting antenna, and
10 wherein the imbedded antenna is molded into the
11 frame of the tape cartridge in such a manner that signals
12 may be received by the imbedded antenna through at least
13 two surfaces of the tape cartridge.

1 17. The tape cartridge of claim 16, wherein the radio
2 frequency signals from the transmitting antenna energize
3 the imbedded antenna via inductive coupling.

1 18. The tape cartridge of claim 16, further comprising:
2 wherein the energized imbedded antenna returns a
3 radio frequency signal containing tape cartridge data
4 stored within the memory device to the transmitting
5 antenna.

1 19. The tape cartridge of claim 18, wherein the signal
2 containing memory device data is returned via a
3 backscattering modulation.

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1 20. The tape cartridge of claim 16, wherein the
2 transmitting antenna is connected to a tape drive.

1 21. The tape cartridge of claim 16, wherein the
2 transmitting antenna is connected to a hand held reader.

1 22. The tape cartridge of claim 16, wherein the flexible
2 antenna is a helical antenna.

1 23. A method of transmitting data from a tape cartridge
2 using radio frequency signals, comprising:
3 imbedding a tape cartridge frame with an antenna;
4 positioning a memory device in a corner of the tape
5 cartridge, wherein the memory device is connected to the
6 imbedded antenna;
7 receiving a radio frequency signal sent from a
8 transmitting antenna at the imbedded antenna, wherein the
9 imbedded antenna is molded into the frame of the tape
10 cartridge in such a manner that signals may be received
11 by the flexible antenna through at least two surfaces of
12 the tape cartridge;
13 detecting a decrease in amplitude at the
14 transmitting antenna indicating the presence of the
15 memory device;
16 transmitting tape cartridge data stored in the
17 memory device to the transmitting antenna.

1 24. The method of claim 23, wherein the radio frequency
2 signals from the transmitting antenna energize the
3 imbedded antenna via inductive coupling.

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1 25. The tape cartridge of claim 24, further comprising:
2 wherein the energized imbedded antenna returns a
3 radio frequency signal containing tape cartridge data
4 stored within the memory device to the transmitting
5 antenna.

1 26. The tape cartridge of claim 25, wherein the signal
2 containing memory device data is returned via a
3 backscattering modulation.

1 27. The tape cartridge of claim 23, wherein the
2 transmitting antenna is connected to a tape drive.

1 28. The tape cartridge of claim 23, wherein the
2 transmitting antenna is connected to a hand held reader.

1 29. The tape cartridge of claim 23, wherein the flexible
2 antenna is a helical antenna.